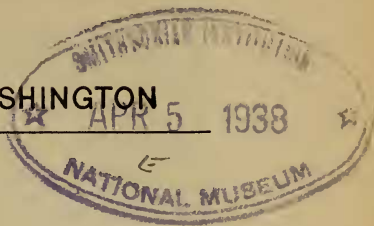


PROCEEDINGS
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A NEW FORM OF CRYPTURELLUS NOCTIVAGUS.

BY JOHN T. ZIMMER.

Some time ago, Mr. H. B. Conover called my attention to certain specimens of a *Crypturellus* in the collections of the American Museum of Natural History from Mt. Duida, Venezuela. In view of the action by a number of recent authors in recognizing *C. erythropus* (Pelzeln) as specifically distinct from *C. noctivagus dissimilis* (Salvadori), the question arose as to whether the Duida birds might not belong to *erythropus*; certainly they could not be referred to *dissimilis*.

Pelzeln described *erythropus* from skins collected by Natterer in "Brasilia" which is determinable (with regard to the species in question) from Pelzeln's later writings as meaning the vicinity of Manaos and the neighborhood of São Joaquim on the Rio Branco. Unfortunately, I have no material from either locality. The original description agrees with specimens of *dissimilis* from Faro and Obidos, Brazil, and from British Guiana.

A letter to Dr. Hellmayr, who has examined the cotypes of *erythropus*, brought the interesting reply that the birds from Manaos, Obidos, and Guiana are inseparable, representing a single form which should bear the name *erythropus*, of which "*dissimilis*" must be considered a synonym. Since the detail has not been given attention heretofore, I propose Manaos as restricted type locality for *Tinamus erythropus* Pelzeln, 1870, Orn. Bras., p. 293.

With this evidence at hand, the Mt. Duida birds prove to belong to an undescribed form which I have placed with *erythropus* in the *noctivagus* group for reasons that are given on a later page.

Grateful acknowledgment is made to Mr. Conover for

calling the problem to my attention and to Dr. Hellmayr for his kind elucidation of the identity of the original *erythropus*. The new form may be known as follows.

Names of colors are capitalized when direct comparison has been made with Ridgway's "Color Standards and Color Nomenclature."

***Crypturellus noctivagus duidae*, new subspecies.**

Type.—from Mt. Duida ("Campamento del Medio"), Venezuela; altitude 350 feet. No. 272,144, American Museum of Natural History. Adult male collected January 19, 1929, by the Olalla brothers.

Diagnosis.—Immediately distinguishable from *C. noctivagus erythropus* of northeastern South America (Guianas to the north bank of the Amazon) by the dark (grayish olive in skins) feet, the clear rufous chest, without any grayish tinge, the much more intense rufous neck and head and, in the female sex, by the narrower and paler bars on a more blackish ground on the rump, upper tail-coverts, and outer surface of the wings.

Males separated from those of *C. n. strigulosus* of the south bank of the Amazon by rufous instead of blackish cap, brighter rufous hind neck, more prominently barred lower back, more broadly white throat, and rufous, instead of gray, breast and sides. Females differ from those of *strigulosus* by more blackish uropygium with narrower and more whitish bars, more narrowly barred outer surface of the wing, more broadly white throat, and rufous, instead of gray, breast and sides. The color of the top of the head and the back of the neck are very similar in the females of both forms.

Range.—Known only from Mt. Duida, Venezuela.

Description of type.—Back of head and neck rich light Bay; crown and forehead somewhat clouded with dusky gray, with fine rufous tips; upper mantle dark Auburn, with very faint dusky freckling; lower mantle slightly paler with indistinct terminal margins of dusky which become better defined on the rump where also there are poorly defined subterminal dark bars separated from the tips by interspaces of Bister; a few scattered subterminal dots of white on the lowermost uropygium expanded on the upper tail-coverts into narrow whitish bars fringed with Bister, while the black bars here are wider than the whitish ones. Lores and superciliary region lighter than the occiput without forming a very conspicuous stripe; auricular region much like the hind neck; malar region again paler, near Sanford's Brown × Burnt Sienna, shading into the color of the hind neck posteriorly. Chin white; throat white with narrow terminal margins of Sanford's Brown; lower throat largely Sanford's Brown × Burnt Sienna; chest Sanford's Brown, duller on the sides of the breast and passing into Light Pinkish Cinnamon on the lower breast and sides of the abdomen, enclosing a white median abdominal stripe of white; crissum like the sides of the belly; flanks darker, near Sayal Brown, anteriorly freckled with dusky, posteriorly broadly barred with black; under tail-coverts Cinnamon, with

a large black area at the base of the feathers extending somewhat distad along the shaft and with the margins and tips of the feathers crossed by blackish vermiculated bars. Wings Clove Brown; outer margins of secondaries freckled with Sepia, narrowly on outer feathers, more broadly on inner ones where the distal portion of the whole outer web becomes light brown, freckled with blackish and with occasional larger black blotches and whitish freckles or vermiculations; tertials with exposed portions of both webs similarly marked; greater and median upper wing-coverts like the tertials but with the black blotches broadened into irregular bars; lesser coverts more rufescent, approaching the color of the back; under wing-coverts sooty along the carpal margin; longer under primary-coverts gray, shorter ones whitish; secondary-coverts gray with whitish tips. Tail (entirely concealed) sooty brown with external margins marked by broad black and narrow pale bars. Maxilla (in dried skin) blackish; mandible yellowish; feet dull olive-gray. Wing, 173 mm.; tail, 45; exposed culmen, 26; culmen from base, 30; tarsus, 51.

Remarks.—The female is like the male on the under surface and on the hind neck but has the top of the head clearer rufous, with traces of exceedingly fine dark cross-bars; chest averaging a little paler rufous; mantle anteriorly with narrow blackish bars which increase in width on scapulars and middle back while the rufous interspaces become paler and narrower; on the rump, upper tail-coverts, upper wing-coverts, and exposed portions of the remiges the ground color becomes quite blackish, crossed by very narrow whitish or pale fulvous bars.

There is some individual variation in this form as in others of the species. One of the males is darker and much more uniform on the back and outer surface of the wings and has the chest paler and duller. Another male goes to the opposite extreme and shows a considerable development in the direction of the wing-pattern of male *erythropus*, although the rufous breast, neck, and back remain as in other *duidae*. Still another bird (possibly wrongly sexed?) has much the pattern of the adult females although the general color of the lower back is not quite so blackish. It also has the throat and chin entirely ochraceous-buffy.

Of three specimens sexed as females, two have the belly more broadly white than any of the males but the third is tinged with buff in that area. This third example has the chest deeply colored like the males; the other two have the pectoral region somewhat paler.

The general tone of the anterior upper parts in the female is very closely matched by the females of *strigulosus* of the south bank of the Amazon; posteriorly *duidae* is much blacker and more narrowly barred. The under parts differ more decidedly since *strigulosus* has the chest gray while *duidae* has it rufous. Nevertheless, a female of *strigulosus* from the right bank of the lower Rio Madeira has the pectoral region as much ochraceous as gray, being marked by ill-defined alternating grayish and ochraceous vermiculations, observable also in some *erythropus*. The dorsal color of the males of *strigulosus* is approached by the most uniformly colored males of *duidae* and the feet are dark in this sex of both forms as well as in the females of *duidae*. On the other hand, two of three females of *strigulosus* have the feet distinctly

paler and (in dried skins) brownish rather than dusky olive, though not so pale as in *erythropus*. The female with dark legs is the one, mentioned above, which has a decided ochraceous tinge on the under parts. A similar sexual difference in the color of the feet is observable in typical *noctivagus*. The distinctions between *erythropus* and *strigulosus* thus are so weakened that it appears to be no longer necessary to maintain specific separation. The relationship of *duidae* to *erythropus*, so far as present material demonstrates, appears to be by way of *strigulosus*.

On the other hand, I am unable to keep *erythropus* specifically distinct from the *cinnamomeus* group since *spencei* of northern Venezuela is intermediate between *idoneus* and *erythropus*, though closer to *erythropus*. True *cinnamomeus* also is too much like *noctivagus*, especially in the female sex, to warrant specific dissociation.

The females of *spencei* and *erythropus* are not distinguishable with certainty. The males of *spencei* are paler brown on the back and those of *erythropus* are darker, more like average *strigulosus*. Two Guianan males are intermediate,—one a little closer to *spencei* and the other closer to *erythropus*, although both have the white throat-patch reduced to obsolescence and have a stronger tinge of rufous on the hind-neck. It is just possible that a series of fresh skins would permit the recognition of "*dis-similis*" as a distinct Guianan form, although the differences noted are no more than are shown by individual variants of other subspecies.

A specimen (sexed as a male) from Maracan, near Faro, Brazil, is markedly different from other Faro skins of *erythropus* as well as from any other bird I have seen. The upper surface has the pattern of ordinary female *erythropus* with a somewhat more strongly rufescent tone. On the under parts, the entire breast is intense deep Sanford's Brown, without a trace of gray, and the belly is near Apricot Buff, without white. The feet are light in color, still with a trace of the original red, although they have a slightly immature appearance, and a number of the under wing-coverts have cinnamomeous tips. Salvadori (1895, 'Cat. Birds Brit. Mus.,' XXVII, p. 535) describes a male from Manaus, presumably a cotype of *erythropus*, as being rufous on the breast, without gray; probably it is a specimen like the bird I have mentioned.

I am unable to match the type of *hellmayri* with any specimens of typical *strigulosus*. It is somewhat darker on the back (approaching the color of *boucardi*, and less extensively blackish on the top of the head, but the differences are not pronounced. The range of *strigulosus* extends westward to eastern Per (as recorded in the list of specimens examined), with no differences of note, although the Peruvian birds may average very slightly deeper rufous on the hind neck. More information about *hellmayri* is greatly needed.

SPECIMENS EXAMINED.

C. n. noctivagus.—BRAZIL: (no exact locality), 1 ♂ (type); Bahia, 1 [♀]; Lamaro, Bahia, 1 ♀; Iguape, So Paulo, 2 ♂.

C. n. hellmayri.—BRAZIL: Humayth, 1 ♂ (type).

C. n. strigulosus.—BRAZIL: Rio Tocantins, Baio, 1 "♀"; Rio Xing,

Tapará, 1 [♂]; Rio Tapajoz, Tauary, 2 ♂; Igarapé Brabo, 1 ♂; Rio Amazonas, Villa Bella Imperatriz, 1 ♂, 1 ♀; Rio Madeira, Igarapé Auará, 1 ♀; Rosarinho, 1 [♀]. PERÚ: Río Ucayali, Lagarto, 5 ♂.

C. n. erythropus.—BRAZIL: Faro, 1 ♂, 1 ♀; Serro de Espelho, 1 ♂; Maracanã, 1 “♂”; Obidos, 1 ♀. BRITISH GUIANA: Quonga River, 2 ♂, 1 ♀; Demerara, 1 [♀].

C. n. spencei.—VENEZUELA: Los dos Ríos, Cumaná, 1 ♀; Cristóbal Colón, 2 ♂, 1 ♀; Ejido, 1 (?).

C. n. duidae.—VENEZUELA: Mt. Duida, “Campamento del Medio,” 3 ♂ (incl. type); Playa del Río Base, 1 ♂, 1 ♀; Valle de los Monos, 1 ♂, 1 ♀; “Middle Camp,” 1 ♂, 1 ♀.

C. n. idoneus.—COLOMBIA: Santa Marta, Bonda, 1 [♂].

C. n. cinnamomeus.—NICARAGUA: Tipitapa, 1 ♂; Volcán Viejo, 1 ♀; Matagalpa, 1 ♂.